



UNITED STATES PATENT AND TRADEMARK OFFICE

h
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,658	06/23/2003	Ryou Kanno	239266US3	6150
22850	7590	06/22/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			HOFFMANN, JOHN M	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1731	
NOTIFICATION DATE		DELIVERY MODE		
06/22/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)
	10/600,658	KANNO ET AL.
	Examiner John Hoffmann	Art Unit 1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 April 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-8 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 13-24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-6,11 and 12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

Continued Prosecution Application

Applicant's election with traverse of Group I, specie A in the reply filed on 4/20/07 is acknowledged. The traversal is on the ground(s) that the Office has not established a serious burden. This is not found persuasive because in the restriction requirement of 3/22/07 did point out why there would be a serious burden. Applicant has not pointed out any error in the Office's determination it is presumed that Applicant was not aware of any error. The Office also determined that there would be an "unreasonable" burden – examiner considers this to be substantially the same thing as a "serious" burden.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7-8 and 13-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/20/2007.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-6 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At line 7 of claim 1, "reference" posture reads on a nebulous mental step conducted prior to the manipulative steps of the claimed process, hence rendering the present process claim unclear in meaning in scope. If applicant wishes to patent detail controls over the recited process, the process steps must be positively recited. See

Seagram & Sons Inc. vs Marzall, 84 USPQ 180. In other words: it is presumed that one could avoid infringing the claim by using a posture that does not have any referencing prior to it – therefore the claim should positively recite the steps used to determine the referencing of the posture.

Claim 4 first requires imaging the glass plate that was “conveyed”. But the rest of the claim seems to indicate that the plate is in the middle of the conveyance. Thus there is confusing antecedent basis for “the posture” (claim 4, line 4), “the reference posture previously stored”, and “the roller in contact with the glass plate”.

Claim 5: there is confusing antecedent basis for “plural rollers”.

Claim 5: it is unclear what is meant by the conjunction being “of” the conveyance. One part of the specification indicates the conjunction being “of” the conveyance; another part indicates it is in conjunction “with” the conveyance. It is unclear if they mean the same thing or not. Examiner is unfamiliar with the phrase “conjunction of”.

Claim 6” there is confusing antecedent basis for the rollers and the moving. Most notably: examiner is confused because claim1 requires the movement be done “individually” whereas claim 6 requires simultaneous movement. These two things are substantially mutually exclusive.

Claim 12: there is confusing antecedent basis for the rollers.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 4-6 and 11-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the newly claimed limitation that at least one of the plurality of rollers is moved individually. First it is noted that the specification only refers to independent movement – it says nothing about movement being done “individually”. Thus it makes it unclear if they are to mean the same thing. Moreover, claim 5 also requires “further” movement (which is independent) – thus it is clear that applicant intends “individual” movement to be something besides “independent” movement. There is simply no support for this other (i.e. individual) movement in combination with the independent movement. The same applies to claim 6: there doesn’t seem to be any support for the individual movement along with the “further” simultaneous movement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Letemps 5226942.

In order to examine the claims, Examiner first interprets independent claim 1, by giving the terms thereof the broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art in light of the written description in the specification, including the drawings, unless another meaning is intended by appellants as established in the written description of the specification, and without reading into the claims any limitation or particular embodiment disclosed in the specification. See, e.g., *In re Am. Acad. Of Sci. Tech. Ctr*, 267 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). As illustrated by the specification and figure 6, the plain language of claim 1 specifies a step of conveying (of any direction and amount, however small) a glass plate (however small) using a roller conveyor (of any size or type) that has a plurality (i.e. at least two) rollers – each which has a rolling axis. The plain language of claim 1 further requires a moving step in which at least one of the rollers move (by any amount, however small) in a direction substantially parallel to the rolling axis, when the at least one is in contact with the conveying plate, for the purpose of positioning the plate to conform the plate to a posture.

Looking to figure 3 of Letemps: 18 is the plate which is conveyed by a roller conveyor with a plurality of rollers (any one of 29 and any one of 23). Roller 29 is moved in an arc, via mechanisms 35-36. See figure 2 which shows feature 17 being pivoted. When it is moving in an arc, the instantaneous movement of the roller is in a direction substantially parallel to the rolling axis. When something moves in an arc, the instantaneous direction would be the liner tangent to the arc. As per col. 1, line 45 of Letemps, 1/10 of a millimeter (i.e. 100 microns) is a relevant distance in the present technology area – it is deemed that over a distance of 100 microns, the Letemp movement would be “substantially parallel to the rolling axis”. This is NOT to be interpreted as Letemps moves only 100 microns, rather that the claim is comprising in nature, and thus there only needs be a movement which is substantially parallel. Clearly the claim permits additional movement – one cannot avoid infringement merely by adding an additional movement to applicant’s movement.

As to the “individually” limitation: it is noted that such is not defined nor described in the specification. Nor is there an art-recognized meaning ascribed to this. Using the plain meaning for “individually” it is deemed that Letemps meets the limitation in the following ways: 1) roller 29 moves independently of roller 23. 2) All of the rollers 29 are part of the “at least one”, thus the collective “at least one” moves individually of roller 23. 3) the each roller 29 has its own path – those the further from the pivot point the faster the movement. Since each movement is at a different speed from the others, each movement is individual. Examiner realizes it is quite easy to see a difference between applicant’s individual movement, and that of Letemps. However, Examiner

cannot reasonably indicates that one interpreting the claims in light of the specification would see that the claims exclude Letemps – most notably because it would require an unreasonable narrowing of the claims that would permit easy avoiding of infringement, merely by inter-relating roller movements. The Office should not indicate that claims are narrower than applicant has clearly demonstrated.

The claim also requires the movement occurs with the glass is in contact with the rollers. The initial movement of the rollers occur prior to contact with the rollers, however, it is clear that rollers are re-centered in reference to the direction of travel at some time after glass is brought in contact with the rollers. See col. 7 , line 40 which indicates the realignment is in reference to moving direction. See also col. 8, lines 1-12 which indicate that the direction of rotation is relative to the straight ahead bearing – not the previous bearing – it is re-centered each time. Letemps is silent as to when the rollers are re-centered: it must be recentered while the glass is on the rollers, or after it has left the rollers. Since there is only two options, it is deemed that Letemps reads on both.

From MPEP 2144.01 Implicit Disclosure:

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

See also, *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir 1985).

One would immediately envision both solutions for recentering the rollers.

If Letemps does not anticipate both, then the following (obviousness rejection) applies: It would have been obvious to return the frame/rollers back to center while the glass plate is still on the rollers, so that each plate is more aligned with additional processing/packaging equipment.

Even without the advantage of having all of the plates aligned after leaving the rollers, such would have been obvious because rearranging the order of steps is generally not a patentable invention. Knowing that the rollers have to be recentered each time, it would have been obvious to do it when the glass is still in contact with them – or after they are have left.

From MPEP 2144.04

C. Changes in Sequence of Adding Ingredients
Ex parte Rubin , 128 USPQ 440 (Bd. App. 1959) (Prior art reference disclosing a process of making a laminated sheet wherein a base sheet is first coated with a metallic film and thereafter impregnated with a thermosetting material was held to render prima facie obvious claims directed to a process of making a laminated sheet by reversing the order of the prior art process steps.). See also In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); In re Gibson, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.).

There is still the further advantage of saving time: one would save time by recentering the rollers, while the glass is still in contact, rather than waiting until after they have left the rollers.

Still further, as indicated by the Supreme Court in KSR vs. Teleflex:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under §103.

It would have been obvious to try to recenter the rollers prior to the ejection of the glass sheet – since there is a finite number of predictable solutions (i.e. 2). The recentering prior to ejection is deemed to be of ordinary skill and common sense.

Claim 4: The using, recognizing and comparing steps are disclosed at col. 6, lines 38. It is deemed that the “supplying a signal” corresponds to finding an “amount” – whether it be found through look-up in a data base, or found via calculation. The amount is deemed to be an “axial” displacement amount, based on the degree the roller’s axis is angularly displaced. Note applicant’s page 14, line 11 which indicates “D” is the amount and figures 8-9 which shows this amount “D” is an angular displacement of an axis. The adjective “axial” serves to indicate what is displaced, not a direction.

Claim 5: Examiner could not find any relevant description of the entire subject matter of the claim. It is deemed that the plain reading of the claim is that the lying of the rollers is “one after another” because 1) figure 6 shows that movements are simultaneous with other movements and 2) under the rules of grammar, modifiers serve to modify the closest relevant item. In other words if “one after another” were to modify the moving (rather than the lying), then the “one after another” is a misplaced modifier.

Claims 6 and 11 are clearly met.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Letemps 5226942.

Claim 12 adds to claim 11 the requirement that the bending makes use of vertical movement of rollers. It is noted that the claim does not require a step of "moving" rollers vertically – thus it is presumed that applicant did not intend that such a step be required. Compare to the steps of "conveying", "moving", "comparing", etc. It would have been obvious to make the Letemps apparatus by moving the rollers up and/or down. It is common knowledge that when building something, one typically needs to move things up and down to get them into a proper location. It would have been obvious to build the Letemps apparatus by lifting up and setting down the rollers. If the rollers were never moved up or down, one could have not have built the machine and thus the bending 'makes use' of the vertical movement used to make the machine.

It is noted that even if the claim was amended to require a step of moving the rollers vertically, such would have been an obvious modification. For example see applicant's page 2, lines 15-27 which shows such is known.

Response to Arguments

Applicant's arguments filed 29 November 2007 have been fully considered but they are not persuasive.

Applicant points out that the previous examiner indicated that Letemps did not teach a method in which the roller group was moved while in contact with the glass in conveyance. As indicated above the present examiner is not in agreement with the previous examiner – nor is there any indication that applicant is in agreement with the prior examiner. It is clear to the present examiner that the movement of the Letemps

rollers causes the glass sheet to move. Since "movement" and "conveyance" are substantially similar – it is deemed that Letemps clearly has contact during conveyance/movement.

It is also argued that Letemps does not teach moving at least one of the plurality of rollers individually. Examiner notes that Letemps does not have the identical "individually" moving that applicant has, however, the present claims are not limited to applicant's individual movement. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner does not see a basis in the record – nor in the prior art - for concluding that applicant's movements are done individually, while Letemps movements are not individual in nature. To be sure, Examiner could construct/find a reasonable definition for "individually". But this would be the effect of examiner limiting the scope of the claims to include some movements and exclude others. This may unduly limit Applicant's scope of protection. The burden lies with applicant to show why applicant's movements are individual – but Letemps are not. Or at least show why the Office's interpretation is improper; why it is not the broadest reasonable.

The PTO gives a disputed claim term its broadest reasonable interpretation during patent prosecution. Hyatt, 211 F.3d at 1372. The "broadest reasonable interpretation" rule recognizes that "before a patent is granted the claims are readily amended as part of the examination process." Burlington Indus. v. Quigg, 822 F.2d 1581, 1583 (Fed. Cir. 1987). Thus, a patent applicant has the opportunity and responsibility to remove any ambiguity in claim term meaning by amending the application. In re Prater, 415 F.2d 1393, 1404-05 (CCPA 1969). Additionally, the broadest reasonable interpretation rule "serves the public interest by reducing the possibility that claims, finally allowed, will be given broader scope than is justified." In re Am. Acad. of

Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting In re Yamamoto, 740 F.2d 1569, 1571-72 (Fed. Cir. 1984)).

The Office's broadest reasonable interpretation includes: 1) the broadest reasonable interpretation of "individually" includes: "not identically", and 2) the claim is comprising in nature, and thus is open to having rollers that move non-individually with the "at least one" – that is, the claim is open to having any number of additional rollers that move in unison with the "at least one".

It is further argued that Letemps does not disclose changing the posture of the glass sheet when in contact with the rollers. See the above rejection which points out how Letemps discloses such, or it would have been obvious.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

None of the art cited on the enclosed PTOL-892 is applied in this rejection. It was the most pertinent art that examiner could find that was not already of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Hoffmann
Primary Examiner
Art Unit 1731

6-18-07

jmh